

### **BOARD AGENDA**

#### **Regular Session**

#### June 18, 2024 – 6:00 P.M.

- I. Call to Order
- II. Roll Call
  - \_\_\_\_Mary L. Gonzales, At Large, Position 1
  - Tom Groneman, District 2
  - David Haley, At Large, Position 2
  - Stevie A. Wakes, Sr., District 1
  - Rose Mulvany Henry, At Large, Position 3
  - Brett Parker, District 3
- III. Approval of Agenda
- IV. Approval of the Minutes of the Regular Session of June 5, 2024
- V. Visitor Comments
- VI. General Manager / Staff Reports
  - i. Update on Bids for Quindaro & Kaw Sites
  - ii. GIS Project Update
  - iii. Miscellaneous Comments
- VII. Public Comments on Agenda Items
- VIII. Board Comments
- IX. Adjourn



### Geographical Information System "Utility Network" Project Update



June 18, 2024



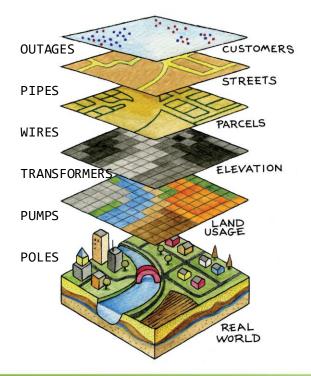
### GIS Utility Network Project Discussion Topics

### GIS Utility Network

- What is GIS and what is the GIS Utility Network (UN) Project?
- Is this a major project, where has it been used before, and who will use it at BPU?
- How is BPU benefitting from this system?
- Project Team & Status

### What is GIS?





# What is Geographic Information Systems (GIS)?

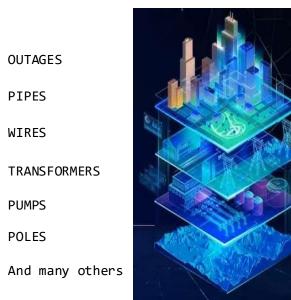
GIS is a company-wide platform that helps users manage and share spatial data for business tasks like creating, editing, viewing, analyzing, and distributing data.

It will integrate with other BPU software, enhancing them with spatial capabilities.

The key is having the product work seamlessly with other applications, integrate the systems, and have accurate data.



## What is the GIS Utility Network?



# The Utility Network is a major step forward in GIS

The GIS <u>Utility Network</u>, or UN for short, is a connectivity-based model that creates a "digital twin" of complex infrastructure networks. A digital twin is a real-time display of the connectivity of BPU's water and electric systems.

The Utility Network allows us to capture and represent data at a greater level of detail than previous GIS systems.

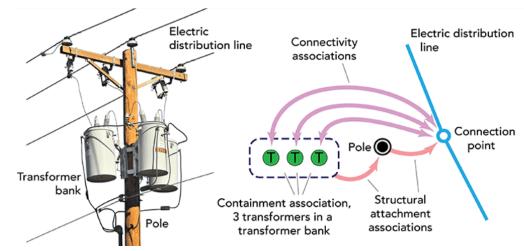
The Utility Network has rules-based editing ensuring accurate data for network analysis.



## Benefits of The Utility Network

#### **Detailed Network Modeling**

- Accurately represents physical components and their Relationships
- Supports complex connectivity and flow models
- Represent dense areas of our networks without clutter
- Network detail capable of moving GIS beyond a tool for operations support into Engineering workflows for analysis and design



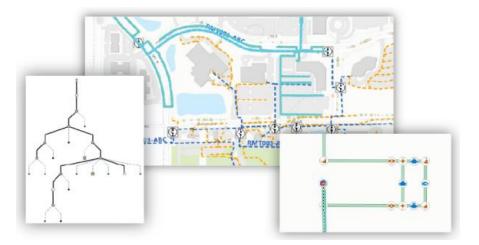
UN "connects" assets (wires, poles, and transformers) in our distribution system



## Benefits of The Utility Network cont'd

GIS UN is more than a mapping system

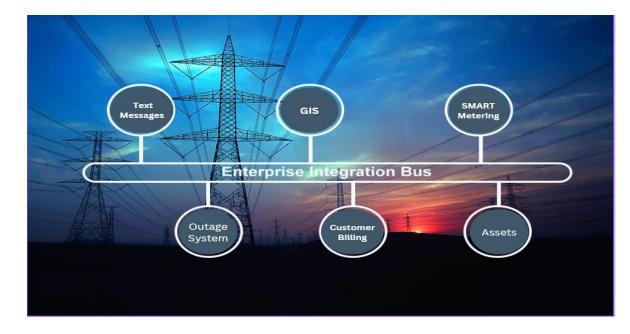
- It is an advanced geographic information system designed to model, manage, and analyze complex utility asset networks
- *Fantastic*, detailed interactive maps and visualizations
- Supports 2D and 3D views
- REAL-time integration
- REAL-time monitoring of network performance and incidents



UN provides tools to improve maintenance and emergency response as well as designs for new development



### We are integrating major BPU systems to GIS UN



Critical BPU Systems are being integrated with other BPU Systems at a rapid pace

Utility Assets for both Water and Electric in the palm of your hands and available across BPU's critical systems

Pipes, wires, transformers, pumps, valves will not only be on a map, but the system <u>will know</u> <u>how assets are connected</u> We've talked about electric, water, and system integration, but how will customer service benefit?





## **Customer Service Benefits**

### **Customer Service Enhancement**

- Integrates with Cayenta CIS to improved service reliability and satisfaction
- Supports better communication with customers regarding:
  - Outages
  - Maintenance schedules
  - Service availability



Improved data accuracy leads to improved outage response equaling improved customer satisfaction



## Utility Network Project Team

#### IT GIS Team

Sponsor: Director: PM: GIS Analyst: GIS Analyst: Architect: Jerry Sullivan Dustin Miller Rob Kamp Robert Karl Tania Taylor Scott Malone

ct: Scott Male

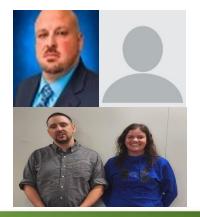
Water GIS Team Exe. Dir: Director: GIS Supervisor: GIS Analyst: GIS Analyst: Civil Engineer:

Steve Green Exe. Dir: Chris Stewart Director: Kelly Bobki GIS Analyst: Elijah Logan GIS Analyst: Gerry Shisler Phillip Brown

#### **Electric GIS Team**

Darrin McNew Pat Morrill Bryce Barth Meghan O'Brien

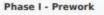






## **Utility Network Timeline**

#### **BPU Utility Network ESRI GI...**



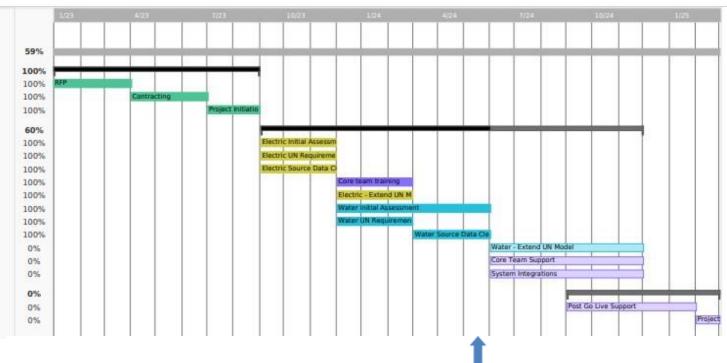
RFP Contracting

Project Initiation

Post Go Live Support

Project Close

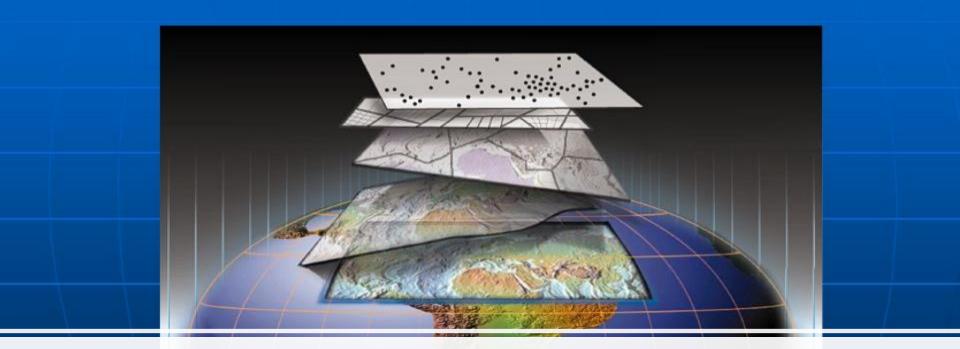
Phase II - Design, Build, Train, & T... Electric Initial Assessment Electric UN Requirements Electric Source Data Cleanup Core team training Electric - Extend UN Model Water Initial Assessment Water UN Requirements Water UN Requirements Water Source Data Cleanup Water - Extend UN Model Core Team Support System Integrations Phase III - Support & Close



Project Number: 103011

#### Status: On Track

We are here



### Thank you